

NE OHIO WINTER WEEKEND CAMPING TIPS

I. GEAR

A. CLOTHING (many comments apply to bedding [p. 2]): * **Use correct materials!!!**

1. INNER LAYER

Best: polypropylene or polyester (example "Thermax")
Good: wool; wool/polyester blends; acrylic ("Orlon")
OK: 50/50 cotton polyester; wool/cotton blends
Deadly: 100% cotton (It traps moisture next to the skin and cools by evaporation (nice in Summer - terrible in Winter).

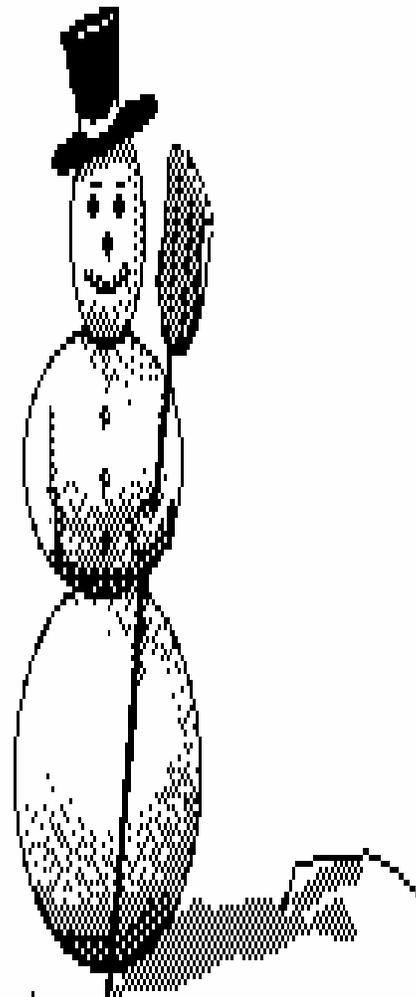
2. INSULATION LAYER(S)

Best: polyester (fleece; "Thinsulate"; pile; quilted)
Good: wool; wool/polyester blends; acrylic ("Orlon")
OK: wool/cotton blends
Dangerous: down (Down gets wet from snow or sweat and can't be dried out in the field. Wet down has NO insulating value so only use it for camping in this climate if you have a replacement handy.
Deadly: Cotton

3. OUTER LAYER - to repel wind and water or wet snow. (Wind and water carry away body heat away.)

Best: Tightly woven nylon, polyester (running pants are good)
Good: Heavy (like felt) wool or 50/50 polyester/cotton
BAD: Cotton anything, especially denim ("jeans")
Note: "Snow suits" may be too warm for anything beyond sitting around.

4. FEET - **The biggest source of problems for Scout winter campers in our cold and wet winters.** Leather Winter boots must be waterPROOF. Silicon, wax, or a waterproof liner (e.g. Gore-Tex) all work to waterproof leather these boots are fairly expensive. Less expensive are shoepacs with rubber bottoms and leather, nylon or rubber tops and a liner of felt, Thinsulate or heavy socks. SOCKS should be wool, polyester, acrylic or blends of these. **NO 100% COTTON!!** Carry several extras! Polypropylene or polyester liners are super, since they wick moisture away from the skin and don't irritate sensitive skin. WARNING: DON'T CRAM IN "EXTRA" SOCKS WHEN IT RESULTS IN A TIGHT FIT. YOU CRUSH OUT AIR (INSULATION) AND RESTRICT BLOOD CIRCULATION (HEAT) TO THE FEET. (Can't afford new winter boots? See p.3 on "Vapor Barriers.") ([see separate document](#))



5. ALL LAYERS

- * **Wear loose-fitting clothing.** (Air between layers = insulation).
- * **Keep it dry!** All insulative materials work best when kept dry. AS much as possible, keep clothing away from rain, snow or perspiration. Don't overheat! **Ventilate to keep comfortably cool before sweating.**
- * **Waterproof material without ventilation is for rainy conditions ONLY -- not real cold.**
- * **Keep it clean.** Dirt and grease in clothing reduce insulating value.
- * **Thicker is warmer** (a few exceptions like "Thinsulate" or similar materials).

6. SPECIAL NOTE ON HEADS (yours, mine, others')

Awake or asleep, you lose 50% plus of your body's heat if your head is left uncovered (a good way to cool off if overheated). Use a hat or cap which covers the ears and back of the neck -- or more. Try a scarf. A hooded outer garment is desirable in really cold weather.

7. SPECIAL NOTE ON HANDS

Mittens are warmer than gloves in really cold weather. Look for Polyester, Thinsulate or Wool. Take a spare pair (socks will work in a pinch). Gore-Tex is great if you can afford it.

B. TENTS

- Tents must be in good condition. Strong wind and heavy snow may come unexpectedly.
- Ventilation is needed -- low on one side and high in the tent of the other side -- or it will rain or snow inside the tent. (But minimize the problem by keeping snow out of the tent. Use plastic bags for wet gear.)
- Typical "skewer" pegs are poor in deep snow and bend in well-frozen ground. Larger diameter, broader or stronger stakes may be needed. Wood 2"x2" works well in deep snow.

C. BEDDING (A sort of clothing. See p. 1 above on "CLOTHING".)

➤ "LOFT" is simply a word for thickness of insulation (trapped dead air). The U.S. Army says the following loft is the minimum needed to keep the average, healthy sleeper reasonably warm inside a tent or shelter. Figures are for the total thickness of the bag (or combined bags and blankets) and assume that about 1/2 of the bag is above the sleeper and 1/2 underneath. For comfort, add 1" of top loft.

LOW TEMP. LOFT	LOW TEMP. LOFT	LOW TEMP. LOFT	LOW TEMP. LOFT
40 3.00"	20 4.00"	0 5.00"	-20 6.00"
30 3.50"	10 4.50"	-10 5.50"	-30 6.50"

➤ UNDER your sleeping bag **MUST** come some insulation which will not compress much under body weight. Closed-cell foam pads or foam-filled air mattresses are best. In a pinch, several layers of blankets, cardboard or many layers of newspaper will work if kept dry. **DON'T IGNORE THIS POINT!**

➤ DESIGN of a sleeping bag affects how well it insulates. The bag does not heat you. You heat the bag. A bag which fits closer to the body means less space to heat. A hood which can be drawn close around the head (or blankets to do the same) prevents loss of heat from the bag and insulates the head. Double offset quilting greatly increases insulating value for the same weight of filler. A draft tube full of insulation behind the zipper is important.

➤ **FILLERS** used in sleeping bags are not equal. Quallofil, Hollofil II, Kodofil, Loftguard and Polarguard are superior to Hollofil 808, which is superior to generic polyester, which is better than acrylic or "textile waste."

➤ **ZIPPERS** should be durable, preferably of nylon or similar plastic since these materials do not freeze and do not cut bag fabric if a run-on (snag) occurs. A longer zipper allows more ventilation and extends the temperature range of the bag.

➤ **COVERS** should be of tightly woven nylon or polyester and **LINERS** should be of nylon or nylon blend. Once again, **AVOID COTTON** (Cold and wears out too fast.) Never sleep with airtight material around your bag. It will trap body moisture which will condense inside the cover and wet the insulation.

D. VAPOR BARRIERS - Staying clear of a violent debate still raging in serious camping circles, one area where vapor barriers seem to work is in overcoming lack of proper winter footwear. A plastic bag over the foot, followed by thick socks, followed by a second plastic bag keeps cold outside moisture out and socks dry. This "sock sandwich" produces a swamp, but it's a warm swamp so long as the Scout is active and the bags don't have leaks. When activity stops, towel off feet put socks back on. Wicking socks of polypro or polyester next to the skin improve comfort. There must be room for all these layers. No cramming.

II. OTHER WINTER CAMPING TIPS

A. BUDDIES - Use the buddy system. Never leave camp alone. Watch your buddies for signs of trouble: hypothermia (too cold); frostbite (freezing skin and flesh; dehydration (Don't wait to get thirsty. You need fluids to keep warm. Keep drinking.)

B. EXTRAS - have extra gloves, pants, and (ESPECIALLY) socks. These things tend to get wet. Extra socks also serve as mittens.

C. NEWSPAPER - can be used to increase insulation but only if kept dry. Layers inside clothing help trap heat, but not if you are working or playing hard (gets wet).

D. DON'T EAT ICE OR SNOW - It's not clean and it lowers body temperature.

E. BRING A BLANKET - If you can, bring a blanket to place around your shoulders when sleeping. It will increase the insulation value of your sleeping bag.

F. NIGHT CAP - Have an extra knit or "watch" cap to wear when sleeping.

G. KEEP THE SNOW OUTSIDE THE TENT - It can be hard, but try to keep snow out of the tent. Sit down with feet outside. Knock off snow and put boots in plastic bag. (Sleeping on top part of boots keeps them from freezing.) Have a kneeling pad outside at the tent door to keep snow off your knees. The idea is to keep the tent as dry as possible.

